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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,147	03/24/2004	Hsiung-Kuang Tsai	A-8996	2767

7590 05/19/2006

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EXAMINER

LESTER, EVELYN A

ART UNIT	PAPER NUMBER
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2873

DATE MAILED: 05/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

HA

Office Action Summary

Application No.

10/807,147

Applicant(s)

TSAI, HSIUNG-KUANG

Examiner

Evelyn A. Lester

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5-12-04</u> . | 6) <input type="checkbox"/> Other: ____. |

Election/Restrictions

1. Applicant's election without traverse of Group I in the reply filed on 3-6-06 is acknowledged.
2. Claims 11-21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 3-6-06.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 5-12-04 was filed before the mailing date of this office action. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the Examiner.

Drawings

5. The drawings were received on 3-24-04. These drawings are approved by the Examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

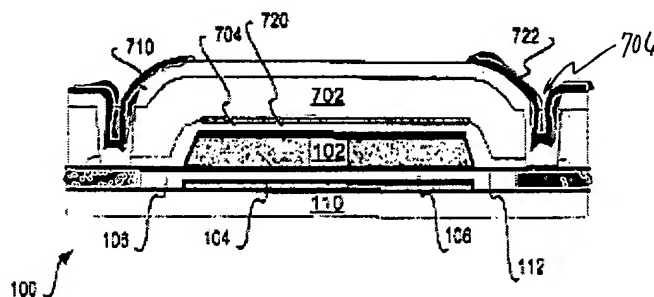
6. Claims 1-6 and 8 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Piehl et al (U.S. Patent Pub. US 2004/0218251 A1).

Piehl et al is interpreted to disclose the claimed invention, as especially noted in Figures 7A-7C and their accompanying text, of an optical interference display panel having a first substrate (which includes element 110, as noted on page 7, ¶ [0087]), an opaque protection structure (722) ¹ and an optical interference reflection structure located between the first substrate and the opaque protection structure, wherein the optical interference reflection structure has a first electrode (102 or 104), a second

¹ Please note that how an element is made is not germane to the patentability of the apparatus as claimed. MPEP 2113: "The patentability of a product does not depend on its method of production."

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electrode (104 or 102) and a support located between the first electrode and the second electrode (the ~~support layer~~ under element 706 as noted in Figure 7C:



and also including 112) which creates a cavity (106).

With respect to claim 3, wherein the opaque protection structure is a ~~U-shaped~~ protection structure (722). Again, please note Figure 7C above.

With respect to claim 4, please refer to page 8, ¶'s [0091] to [0092].

With respect to claims 5, wherein Piehl et al's invention further discloses the opaque protection structure includes a second substrate (702) and an ~~opaque film~~ (720) wherein the film serves as a capacitive plate and/or partial reflector which assumes "opaqueness").

With respect to claim 6, please note Figure 7C above, which shows that the opaque film is between the second substrate and the optical interference reflection structure.

With respect to claim 8, please note page 7, ¶ [0088].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Piehl et al (U.S. Patent Pub. US 2004/0218251 A1).

With respect to claim 7, Piehl et al is interpreted as disclosing the claimed invention as applied in the above rejection to claims 1-6 and 8, but does not specifically teach that the opaque film is a metal film or a light absorptive film. However, Piehl et al do teach that the opaque film serves as a capacitor plate (page 8, top of column 2, in ¶ [0094]), which clearly implies to one of ordinary skill in the art to be a metal film, in order to perform the function of a capacitor plate.

With respect to claim 10, Piehl et al is interpreted as disclosing the claimed invention as applied in the above rejection to claims 1-6 and 8, but does not specifically teach that an adhesive comprises a UV glue or a thermosetting adhesive, for use in the display panel. However, Piehl et al do teach that layers may be bonded (note page 7, ¶ [0086]), especially the "sealing layer." Though Piehl et al teach that this bonding method is costly, among other things, they do provide a working apparatus. Thereby, bonding suggests an adhesive. Since UV glue or thermosetting adhesives are well known in the MEMS art, it would have been obvious to one of ordinary skill in this art to utilize one of

these adhesives since a strong adhesion is required under the operating conditions, such as when the apparatus heats during the operation to extreme temperatures. The adhesives must hold up under these operating conditions, and UV glue and thermosetting adhesives do hold up under extreme temps.

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1-4 and 8-10 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3 and 5-6 of U.S. Patent No. 6,999,225 B2 (Lin et al; common assignee and a common inventor). Although the conflicting claims are not identical, they are not patentably distinct from each other

because the application's claimed invention and the patent's claimed invention are but a slight variation of each.

The application's claimed invention (claims 1 and 9) and the patent's claimed invention (claim 1) both recite an optical interference display panel comprising:

a substrate ("first" or otherwise is only a matter of labels)

a protection structure (Though the application recites this structure as "opaque" and the patent's claimed invention does not, it would have been obvious to one of ordinary skill in the art to provide the protection structure with an "opaqueness" in order to provide ample protection to the optical interference display panel. Since the light interference operates under reflection of light, it is only wise to eliminate as much extraneous light as possible, so as to not interfere with the operation, thereby protecting the display.)

wherein the adhesive has spacers with specific recited function.

Note the application's claimed invention versus the patent's claimed invention:

claim 2 to claim 2;

claim 3 to claim 3;

claim 8 to claim 5; and

claim 10 to claim 6.

Thereby, the application's claimed invention is an obvious variation of the patent's claimed invention.

10. Claims 1-3 and 10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5-7 and 8-10 of copending Application No. 10/884,555 (US 2005/0195462 A1). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed inventions of each application are but a variation of each other.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Both of the applications recite an optical interference display panel comprising:
a substrate ("first" or otherwise is only a matter of labels)
a protection structure (Though the application recites this structure as "opaque" and the patent's claimed invention does not, it would have been obvious to one of ordinary skill in the art to provide the protection structure with an "opaqueness" in order to provide ample protection to the optical interference display panel. Since the light interference operates under reflection of light, it is only wise to eliminate as much extraneous light as possible, so as to not interfere with the operation, thereby protecting the display.)

wherein the adhesive has spacers with specific recited function.

Note the application's claimed invention versus the patent's claimed invention:

Claims 7 and 10 to claim 10; and

Claims 5-6, 8-9 to claim 3.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evelyn A. Lester whose telephone number is (571) 272-2332. The examiner can normally be reached on subject to an increased flex schedule, M-F, 10-7pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky L. Mack can be reached on (571) 272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Evelyn A. Lester
Primary Examiner
Art Unit 2873